

Assignment 8

Textbook Assignment: "Fabrication and Manufacture." Pages 10-1 through 10-30.

Learning Objective: *Use correct terminology when discussing yarns and fabrics.*

- 8-1. What is the basic unit used in the fabrication of textile yarns and fabrics?
1. Staples
 2. Fiber
 3. Yarn
 4. Fillers
- 8-2. What is the edge of material called that has a woven finish to prevent raveling?
1. The material edge
 2. The manufactured edge
 3. The selvage edge
 4. The finished edge
- 8-3. Threads that run lengthwise and parallel to the selvage edge are called what?
1. Warp thread
 2. Filling thread
 3. Locking thread
 4. Basic thread
- 8-4. Which of the following is another name used for filling threads?
1. Woof
 2. Pick
 3. Weft
 4. All of the above
- 8-5. Bias cuts are made at what angle to the filling threads?
1. 180°
 2. 25°
 3. 90°
 4. 45°
- 8-6. Why is a bias cut used to manufacture a parachute?
1. To save material
 2. To prevent tearing between two sections
 3. To provide elasticity
 4. All of the above
- 8-7. What name is given to the force required to break material?
1. Breaking strength
 2. Tensile strength
 3. Warp strength
 4. Filler strength
- 8-8. What determines the weight of cloth?
1. Ounces per running yard
 2. Ounces per square foot
 3. Ounces per square yard
 4. Ounces per running foot
- 8-9. The definition of cloth is any material that is over how many inches from selvage edge to selvage edge?
1. 10
 2. 12
 3. 14
 4. 18
- 8-10. Which of the following is a basic weave?
1. Plain
 2. Twill
 3. Both 1 or 2 above
 4. Warp
- 8-11. Which type of weave gives the smoothest finish and is the easiest to manufacture?
1. Twill
 2. Plain
 3. Warp
 4. Filling

- 8-12. Heat is less damaging to cotton than it is to synthetic fibers.
1. True
 2. False
- 8-13. At approximately 700°F, Nomex fabric will begin to do which of the following'?
1. Burn
 2. Melt
 3. Char
 4. Disintegrate
- 8-14. Webbing is defined as material that is less than how many inches from selvage edge to selvage edge?
1. 6
 2. 8
 3. 10
 4. 12
- 8-15. Textile tapes can weigh up to how many ounces per square yard?
1. 3
 2. 10
 3. 15
 4. 20
- 8-16. Depending on the project, either right- or left-twist thread can be used on a sewing machine
1. True
 2. False

Learning Objective: *Discuss characteristics? specifications, and care of fabrics.*

- 8-17. An ideal storage area for textile material would be dry and out of direct sunlight, with a temperature of how many degrees?
1. 50°F
 2. 60°F
 3. 70°F
 4. 80°F
- 8-18. Exposure to which of the following elements would cause the most serious damage to nylon material?
1. Mildew
 2. Direct sunlight
 3. Fresh water
 4. Salt water

- 8-19. Which of the following factors is/are affected by the air permeability in a parachute assembly?
1. Opening time
 2. Opening force
 3. Stability
 4. All of the above
- 8-20. A length of nylon cord, which is 100 feet long and has an elongation of 10%, can be stretched to what maximum distance without breaking?
1. 110 ft
 2. 120 ft
 3. 130 ft
 4. 140 ft
- 8-21. What does the term "moisture regain" mean when referring to fibers?
1. The percentage of static electricity it absorbs from the air
 2. The percentage of moisture it absorbs from the air
 3. The percentage of static electricity it repels
 4. The percentage of moisture it repels
- 8-22. Military specifications for parachute materials require that, after 50 hours of exposure to sunlight, parachute fabrics should not lose more than what percent of its original strength?
1. 10%
 2. 20%
 3. 25%
 4. 50%
- 8-23. What percentage can nylon be stretched without being damaged?
1. 5 to 25%
 2. 10 to 20%
 3. 15 to 30%
 4. 18 to 40%
- 8-24. What is the percentage of elasticity in nylon?
1. 70%
 2. 75%
 3. 80%
 4. 100%

8-25. Nylon has what percent of moisture regain?

1. 2.5
2. 3.2
3. 4.2
4. 5.5

8-26. What is the melting point of nylon material?

1. 382°F
2. 482°F
3. 540°F
4. 600°F

Learning Objective: *Identify and discuss special hand tools, grommets, and fasteners.*

8-27. When installing the chuck and die into a grommet press, the chuck is the upper tool and the die is the lower.

1. True
2. False

8-28. A properly set chuck and die will have a clearance of how many inches?

1. 1/8
2. 1/32
3. 1/2
4. 3/4

8-29. A carpenter's square has arm measurements of how many inches?

1. 12 and 24
2. 14 and 24
3. 16 and 24
4. 18 and 24

8-30. Which of the following tools is best suited for making holes in material that will use snaps or speedy rivets as fasteners?

1. A hand press
2. An awl
3. A star punch
4. A hot iron

8-31. Which of the following sizes of grommets is the smallest?

1. 1
2. 2
3. 3
4. 4

8-32. When setting a grommet, the collar size must match the punch size.

1. True
2. False

8-33. When using a grommet set to install a grommet, what should you use to strike the punch?

1. A ballpeen hammer
2. A rawhide mallet
3. A setting maul
4. A hand press

8-34. What is the most common type fastener used on clothing?

1. Velcro
2. Three-way locking
3. Glove fastener
4. Curtain fastener

8-35. Which of the following type fasteners would you use if you needed extra security?

1. Segma Dot
2. Durable Dot
3. Glove
4. Three-way locking

8-36. Three-way locking snaps are supplied in how many sizes?

1. One
2. Two
3. Three
4. Four

8-37. Curtain type fasteners are available in how many sizes?

1. One
2. Two
3. Three
4. Four

8-38. Which of the following methods is used to clean grease and dirt from a slide fastener?

1. MEK
2. Toluene
3. Soap and water
4. Stoddard solvent

8-39. After cleaning a slide fastener, which of the following lubricants should you use to lubricate it?

1. Oil
2. Graphite
3. Either 1 or 2 above, depending on the material
4. Silicone gel

8-40. What action should you take if you discover that the bead on a slide fastener is torn?

1. Replace the complete slide fastener
2. Replace the bead
3. Replace only the broken side
4. Repair the bead

8-41. To shorten an interlocking slide fastener, the chain should be how much shorter than the opening in the material?

1. 1/2 in
2. 3/4 in
3. 1 in
4. 1 1/2 in

8-42. Slide fasteners are available in how many types?

1. One
2. Two
3. Three
4. Four

8-43. Slide fasteners are supplied in how many sizes?

1. Six
2. Five
3. Three
4. Four

8-44. What grade of slide fastener is made from brass?

1. I
2. II
3. III
4. IV

8-45. Why should you use yellow beeswax on hand sewing thread?

1. It contains no oil
2. To prevent fraying and untwisting
3. Both 1 and 2 above
4. To keep the thread from weakening

8-46. Which of the following stitches is used to temporarily hold a seam together?

1. Overthrow stitch
2. Baseball stitch
3. Running stitch
4. Basting stitch

8-47. Which of the following stitches should you use if a sewing machine is not available?

1. Baseball stitch
2. Overthrow stitch
3. Running stitch
4. Lock stitch 301

8-48. Which of the following stitches is used to sew an eyelet onto a parachute container?

1. Baseball stitch
2. Overthrow stitch
3. Running stitch
4. Eyelet stitch

8-49. Which hand stitch should you use when a neat appearance is necessary to the seam?

1. Hidden stitch
2. Lock stitch
3. Baseball stitch
4. Basting stitch

8-50. What type of needle is used to make a hidden stitch?

1. 1 1/2-inch curved
2. 2-inch straight
3. 1 1/2-inch straight
4. 2 1/2-inch curved

Learning Objective: *Identify hand-sewn seams and stitches.*

Learning Objective: *Identify and discuss machine-sewn stitches and seams.*

8-51. Machine-sewn seams have which of the following advantages over hand-sewn seams?

1. Uniformity of tension
2. Speed
3. appearance
4. All of the above

8-52. Which of the following stitches is a U.S. standard lock stitch?

1. 301
2. 302
3. 303
4. 304

8-53. There are how many classes of seams?

1. One
2. Two
3. Three
4. Four

8-54. What type of seam would you make if you laid one piece of material on top of another and ran a row of stitches down one side?

1. A lapped seam
2. A superimposed seam
3. A bound seam
4. A edge finishing seam

8-55. If your thread should break while sewing a seam, you should start sewing again

1. 1/2 inch behind the break
2. 1/8 inch behind the break
3. 3/4 inch behind the break
4. 1 inch behind the break

Learning Objective: *Select the correct knot for various applications in survival equipment work.*

8-56. What is the simplest knot used to join two cords together?

1. Bowline knot
2. Overhand knot
3. Square knot
4. Binders knot

8-57. Which of the following knots is the most common used to join two cords together?

1. Binders
2. Square
3. Surgeons
4. Half-hitch

8-58. What knot would you use for a safety tie on ripcord pins?

1. Overhand
2. Square
3. Half-hitch
4. Bowline

8-59. Which of the following knots is used to secure the parachute suspension lines to the connector links?

1. Clove hitch
2. Sheepshank
3. Bowline
4. Binder